



Review of Ministry of Business, Innovation and Employment's tourism statistics



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1 Executive summary

Purpose

The purpose of the review of Ministry of Business, Innovation and Employment's tourism statistics is to assess the systems and processes used to produce the Ministry of Business Innovation and Employment's (MBIE) official tourism statistics, and identify areas for improvement. The review also assesses progress MBIE has made against recommendations made in the 2011 Tourism Data Domain Plan.

The review was undertaken by Statistics NZ at the request of MBIE.

The scope of the review was dictated by the review's terms of reference. These were developed and agreed upon by senior managers from MBIE and Statistics NZ. The 4 broad questions from the terms of reference were:

- How well does MBIE's current suite of tourism statistics meet the needs defined in the 2011 *Tourism data domain plan* (MBIE, 2011)?
- Is the supporting infrastructure, system and processes surrounding the tourism statistics of the quality required?
- Can MBIE produce the tourism statistics more efficiently in a sustained manner?
- What other opportunities are there for improvement?

Method

To conduct the review, we:

- interviewed MBIE staff members who collect, process, and manage tourism data
- reviewed supporting documentation on the collection, processing, and dissemination of tourism statistics
- interviewed key stakeholders of MBIE tourism statistics (MBIE stakeholders were invited to participate).

The review team acknowledges the cooperation and assistance of MBIE staff in discussing issues and responding to requests for documentation and information, and of stakeholders in providing feedback on the tourism statistics.

Key findings

Progress towards recommendations in *Tourism data domain plan*

Overall, the review panel found that a considerable amount of progress had been made towards the recommendations outlined in the *Tourism data domain plan* (MBIE, 2011). At the time of this review, MBIE had successfully implemented the three highest-priority initiatives:

- redeveloping the International Visitor Survey (IVS)
- developing regional tourism indicators
- improving the forecasting methodology.

In making these improvements MBIE has increased efficiency and decreased gaps in the tourism statistics. Improvements had also been made to tourism statistics that go beyond the Tourism Data Domain Plan recommendations. MBIE has increased the availability of the tourism data and streamlined the dissemination of tourism statistics making it easier for customers to access.

In addressing the areas for improvement identified by the Tourism Data Domain Plan, MBIE started with those that have the greatest impact on the overall suite of tourism statistics. MBIE has now begun to focus on the lower priority recommendations outlined in the domain plan.

High degree of quality

As part of the review of the tourism statistics, we compared the suite of statistics against the Principles and Protocols applied to New Zealand's most important statistics (Tier 1 statistics). While the IVS is the only Tier 1 tourism statistic produced by MBIE, the remaining suite of tourism statistics fully or mostly meet the Tier 1 Principles and Protocols, overall attaining a high degree of quality and meeting stakeholder identified needs.

Robust processes

Overall, our review found that MBIE has robust processes in place and is catering for its stakeholders. In the last few years MBIE, has taken advantage of software packages (eg open source packages like 'R'), resulting in high levels of automation in the processing and analysis of tourism data. This automation means that MBIE is able to continue producing tourism statistics efficiently.

Another benefit of this automation is that MBIE staff members have had more time to investigate and implement cutting-edge dissemination tools, like SHINY. This dissemination tool has the potential to allow customers to interact and customise their dissemination experience. The rollout of new dissemination tools should also bring data and stories together in an easily accessible place on MBIE's website. The tourism team at MBIE has a continuous improvement focus which is reflected in the high quality of their existing suite of tourism statistics.

Balancing conflicting needs

As part of producing the tourism statistics MBIE does well to balance the sometimes conflicting needs of their diverse stakeholder group. A number of the tourism statistics MBIE produces are niche topics, meeting the needs of a small number of stakeholders. To ensure that the widest range of stakeholder needs continue to be met MBIE apportions resources across the suite of tourism statistics to achieve the greatest value.

Recommendations

The review team identified three main aspects of the suite of tourism statistics produced by the Ministry of Business, Innovation and Employment where improvements could be made.

Our recommendations are:

Recommendation 1: MBIE better communicate the validity and evidence of the quality of the data, particularly for the International Visitor Survey and Regional Tourism Estimates. MBIE could also consider adding a context for the data and analysis. This would provide customers greater confidence in the quality assurance processes and understanding of the information.

Recommendation 2: Communicate any change to a release date to stakeholders as early as possible. This enables stakeholders to change their work programme to accommodate any delays.

Recommendation 3: Continue work on developing a regional domestic tourism volumes series until they are of sufficient quality to publish. We understand the challenges MBIE faces in this area and agree with its decision to not publish data until it is confident in the quality. The continued development and subsequent release of regional domestic tourism volumes would fill a remaining gap in MBIE's suite of tourism statistics.



2 Glossary of acronyms

BNZ	Bank of New Zealand
CAM	Commercial Accommodation Monitor
CAS	Convention Activity Survey
CDS	Convention Delegate Survey
DTS	Domestic Travel Survey
ECT	electronic card transaction
IVS	International Visitor Survey
MBIE	Ministry of Business, Innovation and Employment
NZIER	New Zealand Institute of Economic Research
RTE	regional tourism estimates
RTI	regional tourism indicators
RTS	Resident Travel Survey
TDP	Tourism Domain Plan
TSA	Tourism Satellite Account
VEM	Visitor Experience Monitor

3 Introduction to the review of tourism statistics

We periodically review official statistics collected within the public sector to ensure the information being produced is relevant, and that suitable systems and processes are used to produce the information.

In 2011, MBIE completed a review of its programme of official tourism statistics, and produced *Tourism data domain plan* (MBIE, 2011).

MBIE asked us to assess their progress against the recommendations made in the *Domain Plan* and identify improvements to meet official statistics best practise.

[See appendix 1](#) for the full terms of reference for the review.

[See appendix 2](#) for the recommendations made in the *Tourism data domain plan*.

Framework

We used *Principles and Protocols for Producers of Tier 1 Statistics* (Statistics NZ, 2007) as a framework to assess MBIE's systems to collect, process, and disseminate its tourism statistics.

Tier 1 statistics have a high level of national importance, and must be produced with integrity and accuracy to maintain public trust and confidence. The International Visitors Survey data are classed as Tier 1 Official Statistics. The principles and protocols are also useful benchmarks against which to assess the other – non tier 1 – statistics administered by MBIE.

[See appendix 3](#) for a summary of the principles and protocols for Tier 1 statistics.

MBIE's 2011 tourism data domain plan

The purpose of MBIE's 2011 *Tourism Data Domain Plan* was to guide the compilation and dissemination of tourism data, in recognition of the contribution the tourism industry makes to the New Zealand economy. Developed in consultation with government, business, and tourism industry stakeholders, it identified the highest priorities for tourism statistics, and the means by which these priorities could be met in the following five to eight years.

The domain plan for tourism data identified five important topic areas that need to be informed by tourism statistics:

- the value of tourism
- the growth, innovation, productivity, and efficiency of tourism businesses
- the value of government interventions
- global competitiveness
- the sustainability of New Zealand tourism.

It also highlighted the need to identify and measure Māori tourism – tourism products and services relating to aspects of Māori culture, and tourism businesses owned by Māori – within each topic area.

The domain plan reviewed the ways in which existing statistics produced by the Ministry of Economic Development and other agencies provide information in the five topic areas. It identified a number of gaps where existing tourism statistics do not provide adequate coverage, and outlined 20 recommendations to address these gaps.

The recommendations were given a priority score based on their relative complexity, and the degree of industry need. This assessment produced nine high-priority work streams:

- Redevelop the International Visitor information, including redesign the International Visitor Survey and develop an education tourism series and cruise series.
- Develop new regional indicators to provide more accurate and timely information for regional investment and planning purposes.
- Introduce scenario planning as a forecasting method to bolster the forecasting process.
- Provide more information on tourism businesses to gain an understanding of their growth, innovation, productivity, and efficiency.
- Improve the range of short term indicators available for industry.
- Create a new research programme to make sure niche, subsector, and specialist topic areas are covered by the Ministry's research.
- Improve the distribution of the dataset to ensure all interested stakeholders have ready and easy access to the latest information.
- Take advantage of developing technologies to access new data sources for research.
- Work on smaller parts of the dataset that don't naturally fit into major categories, including the Tourism Industry Monitor and conference surveys.

[See appendix 2](#) for the full list of recommendations.

MBIE tourism statistics

MBIE and Statistics NZ are the primary organisations involved in the production of official tourism statistics. This report concerns the suite of tourism statistics currently administered by MBIE:

- the International Visitor Survey (IVS)
- regional tourism indicators and regional tourism estimates (RTI and RTE)
- New Zealand Tourism Outlook ('forecasts')
- Resident Travel Survey (RTS) and discontinued Domestic Travel Survey (DTS)
- Convention Activity Survey and Convention Delegate Survey (CAS and CDS).

4 International Visitor Survey

The International Visitor Survey (IVS) run by MBIE measures the travel patterns and expenditure of international visitors to New Zealand. Data includes expenditure, places visited, activities/attractions, accommodation, and transport. Annual IVS data is released every quarter (March, June, September, and December). This is the only tourism collection produced by MBIE that is currently a tier 1 statistic and as such is the most important tourism statistic that MBIE produces.

IVS data is used in the compilation of key economic outputs, including Statistics NZ's balance of payments statistics, gross domestic product, and the tourism satellite account (TSA). Tourism industry stakeholders we spoke to also list the IVS as one of the most important sources of tourism data that MBIE produces.

The IVS is collected by screening departing visitors at key international airports. Eligibility is determined and email addresses collected. Participants are then emailed a link to an online survey. TNS New Zealand – a market research agency commissioned by MBIE – is responsible for collecting, processing, and delivering data obtained through the IVS survey, and MBIE is responsible of analysing and publishing the data and results.

In 2011, the IVS was reviewed and subsequently redeveloped as part of the Tourism Data Improvement Programme implementing the Tourism Domain Plan. The aim of the redevelopment was to reflect changes in the industry and to improve the reliability of the IVS.

Review of the IVS against Tier 1 principles

Here is our assessment of the IVS against the nine tier 1 principles.

Relevance

- The IVS's methodology clearly states the purpose of the survey.
- MBIE are aware of customer needs and are regularly involved in consultation with key customers.
- The IVS is a key dataset as it contributes to macroeconomic statistical outputs such as GDP and the balance of payments.
- Data is collected continuously so it is up to date.
- The IVS is a Tier 1 (nationally important) statistic.

Integrity

- MBIE is confident in the practices maintained by TNS New Zealand in the collection, process, and delivery of data to them. TNS New Zealand is a full member of the Market Research Society of New Zealand and the Association of Market Research Organisations and is therefore bound by the rules and regulations set out by the two organisations. These include ensuring privacy of the respondents – no information that can identify individuals is passed on to MBIE.
- IVS data is released quarterly according to a published calendar of release dates available on their website. However, delays in the release of IVS data are not currently well publicised by MBIE.
- Results are presented clearly on MBIE's website with key tables and commentary. Explanations are given with links to further data quality information.
- Where other organisations provide data or contribute to the production of the IVS and its results, due credit is given, with the source always mentioned.

Quality

- MBIE uses sound statistical methodology in producing the IVS and publishes a description of the methodology on their website. The infrastructure, systems, and processes in place are adequate to assure the quality of Tier 1 statistics.
- The IVS technical description document gives further technical information on how the IVS is produced. This document is available on request, however it should be made available from MBIE's website to ensure transparency of methods used.
- The processes MBIE are responsible for are clearly documented in internal process documentation. The documentation outlines each stage of the process with set steps for carrying out each task. The steps of the process steps follow sound statistical methods and data quality is assured through built-in validation checks automated in the software 'R'.
- A culture of improvement surrounds the IVS, evident in the reviews that have resulted in both the Tourism Domain Plan and the redevelopment of the IVS. Various analyses are also carried out on a regular basis to assess possible improvements, for example analysis was done on exchange rate/rates spend with no major conclusions.
- Data quality information is available on the MBIE website including data reliability (sampling/non-sampling errors), classifications, and definitions. However the technical description (that further outlines the details of the survey population, sample design, weighting, estimation is only available on request. It could be made publically available for further transparency.
- Documentation around the changes made to the questionnaire, and the impacts and the reasons for change are well explained and available on the MBIE website. Work is currently being done to create a reliability of time series guide for customers. This is on track and will be made publically available later in 2015.
- There needs to be more clarity on the process and escalation policy in which errors in data and revisions are dealt with.

Coherence

- Infotools, SPSS, and R programming are used to automatically carry out processes on the data. This ensures consistency and coherence in the processing of the data and minimises bias.
- Classifications and definitions are clear and available on the website.
- The redeveloped IVS questionnaire removed education purpose of visit (individuals visiting New Zealand to attend school or study are no longer included) to align with international macroeconomic frameworks.

Accessibility

- Access to IVS results are open and there is equal access. The Minister of Tourism is briefed on the results at the time of release.
- Commentary, key tables, and links to other organisations' outputs using the IVS data are available on the website.

Efficiency

- The redesigned sample structure of the IVS has improved its efficiency and accuracy. It now makes use of historical visitor departure patterns to draw its sample rather than a flight-based approach. This means the sample is selected from departure times that have a high probability of including the target population.

- Redesigned collection mode has also improved efficiency and cut the survey completion time in half. It has also allowed respondents to fill in the survey in their own time rather than on the spot at the airport.
- The Visitor Experience Monitor (VEM) was combined with the IVS data to attain a better mechanism for measuring visitor satisfaction. A product to disseminate this information has been developed but is not yet publically available.

Protecting respondent information

- The processed data MBIE receives does not contain identifying information.
- Confidentiality is maintained by the rules and regulations set out by Market Research Society of New Zealand.
- Respondents are informed of the intended use of the data when screened at the airport. Online IVS FAQs are available from their website.

Minimising respondent load and maximising existing data sources

- During the redevelopment of the IVS, large efforts were made to reduce respondent burden. Both the collection mode and the length of the questionnaire has been changed, and the time taken to complete the survey has approximately halved.
- MBIE partners with other organisations to use existing data and systems that are of benefit for the IVS data. For example, MBIE uses Statistics NZ's international travel and migration data to produce their population tables and NZ.stat tables for dissemination.
- MBIE added value to their data by combining the VEM and IVS data to better measure visitor satisfaction. This should be made publically available.

International participation

- The IVS is similar to inbound passenger surveys conducted overseas.
- IVS results are tested within the macroeconomic framework (Statistics NZ's the balance of payments and also national accounts) to validate results in the context of other economic indicators.

Progress made against Tourism Domain Plan recommendations

The main recommendation outlined in Tourism Domain Plan that relates to the IVS is to redevelop the IVS to improve coverage and reliability. This has been completed, meeting almost all the suggested recommendations, namely:

- questionnaire has been reduced in length
- extra port added to collect data (Queenstown international airport)
- mode of the survey improved by splitting it into two stages: assessing eligibility and collecting email addresses at airports and later sending through the online survey. This has reduced respondent burden by allowing respondents to complete the survey in their own time rather than on the spot
- international education segment has been removed to align with balance of payments definitions, one of the key customers of the data.

MBIE has documentation available on their website that outlines and explains the changes to the survey and the impact that has on the data and results.

MBIE has also met the following recommendation made in the domain plan:

- Improve their measure of Māori tourism by including a 'Māori activities' section and places visited that are significant to Māori tourism. The VEM has also added 'indigenous culture' in its selection options for why visitors decided to come to New Zealand.

Areas where MBIE has not met the recommendations set out in the Tourism Domain Plan for the IVS redevelopment include:

- Combine the IVS with the VEM to create a better mechanism for measuring visitor satisfaction – this is complete but not yet published.
- Develop a cruise passenger series. Cruise passenger expenditure is currently a source of partial undercoverage, and would feed into important economic aggregates including balance of payments, gross domestic product, and the tourism satellite account. This data would also be useful for the cruise industry.
- Investigate models of how to measure ability to influence travel decisions (Recommendation 8 – Global competitiveness).

Although these last two Domain Plan recommendations have not been met, there are other areas where MBIE stands to make greater gains from investing resources. The review team does not see the development of a cruise series or models of travel decisions to be a priority at the moment. Cruise passengers are a source of partial undercoverage of tourism statistics, but are not totally excluded. Cruise passengers are only totally excluded if they both arrive and depart via ship, whereas we know many fly in or out. The undercoverage is likely to be a small percentage of total tourism.

MBIE have also made other improvements to the IVS that did not form part of the Domain Plan. These include:

- improving their outlier identification method and backdating the new methodology to the start of the IVS time series
- planning to investigate seasonal adjustment and inflation adjustment for IVS data – since this is something that Statistics NZ already does, we could work with MBIE to better link the data and save duplication in both carrying out seasonal adjustment
- planning to create a reliability of time series guide for the impact on the data from changing the survey.

Stakeholder views on the IVS

The stakeholders we interviewed identified the IVS as one of the most valuable statistics produced by MBIE. The IVS is a rich source of information on international travel volumes, patterns, and expenditure. It is often used for setting growth targets and guiding investment decisions. Stakeholders highlighted the importance of IVS data as a key input into balance of payments, gross domestic product, and the tourism satellite account. They also emphasised that it is one of the few sources of information on Māori tourism.

A number of the stakeholders identified concerns with published IVS data, in particular the large increases in international tourism reported in recent quarters, and frequent revisions made to the data. They felt that increases shown by other indicators related to international tourism were not nearly as substantial as those shown by the IVS, and they were not confident in the results. These stakeholders desired more extensive commentary and evidence for the validity of the IVS data, especially when movements were unexpected. They also requested more detail in the published methodology, and microdata that was easily accessible.

However, after reviewing MBIE's current processes and documentation, the review team believe this is more an issue of communication than quality. MBIE investigates any issues that arise from their published data and we are confident that sufficient validation checks are being used. MBIE data is tested within the macroeconomic statistics framework and so is tested against other economic indicators. Stakeholders and customers would benefit

from improved communication from both MBIE and Statistics NZ regarding both education on how to use the data and assurance on the quality of the data.

Summary

The International Visitor Survey is one of the key sources of tourism data produced by MBIE, as confirmed by stakeholders. This is reflected in the focused effort MBIE has put towards improving the IVS and its surrounding processes and documentation. Almost all improvement plans regarding the IVS, as set out in the Tourism Domain Plan, have been implemented and the correct emphasis was put on achieving these as a priority. The collection currently runs efficiently, and the review team does not consider that major improvements are necessary.

Areas for improvement for IVS statistics

Here are suggestions for improvement, which MBIE could consider within a cost-benefit framework.

- Improve communication to customers and stakeholders to improve understanding of how the data is collected, processed, and published. Also outline validation and error processes to assure customers of its quality. This should be a joint effort by both MBIE and Statistics NZ.
- Outline a clear process/policy in the event of a delay in release of data as stated on the release calendar.
- Release the product that has been developed which combines the VEM and IVS to create a better measure for visitor satisfaction.

5 Regional tourism indicators and estimates

MBIE's regional tourism indicators (RTIs) and regional tourism estimates (RTEs) were developed in 2012, in response to recommendations in the *Domain Plan*. The RTIs and RTEs use electronic card transaction (ECT) data to assess domestic and international tourism expenditure at a regional level.

The monthly regional tourism indicators give an index of tourism expenditure that can be analysed by tourism type (domestic versus international tourism), origin of cardholder, and location of merchant. These series indicate movements in tourist spend (presented in relation to a base year, currently 2008), but they are not weighted up to give an estimate of total expenditure. MBIE is currently reviewing the RTI series – in consultation with us and tourism industry stakeholders. As part of this current review, they will investigate the possibility of generating monthly estimates of total expenditure.

The regional tourism estimates give annual regional estimates of tourism expenditure, which can also be broken down by industry (eg accommodation, food and beverage, retail sales). They use RTI data, but weighted up to match annual estimates of total tourism expenditure by product (from Statistics NZ's Tourism Satellite Account), and the distribution of international expenditure by visitors' country of origin (from MBIE's International Visitor Survey).

Marketview provide MBIE with domestic and international ECT data monthly. The international data consists of payments made on the Paymark network (representing roughly 70 percent of New Zealand merchants) by holders of international cards. The source for the domestic data is BNZ ECT data (excluding corporate credit card expenditure). BNZ makes up roughly 20 percent of the domestic household card market in New Zealand. Domestic tourism transactions are defined as all spend by cardholders with merchants located outside the area in which the cardholder resides (unless cardholders treat the merchant area as local).

Importantly, the ECT data does not cover cash or cheque payments, ATM withdrawals, online purchases, or telephone payments. The extent of undercoverage is likely to vary by origin of cardholder (eg Chinese tourist spending is less well covered by ECT data), and industry (eg accommodation is more often purchased online than food and beverage purchases). Despite these known gaps, the coverage of ECT data is likely to be substantially better than it would be if survey methodology was used.

Review of the RTIs and RTEs against Tier 1 principles

Here is our assessment of the RTIs and RTEs against the nine tier 1 principles.

Relevance

- Stakeholders highly value regional tourism data, and the RTEs and RTIs provide essential demand-side information at a regional level.
- Website analytics indicate that the RTIs – especially the international series – are among the more popular of MBIE's tourism statistics.
- The relevance of the RTI data is primarily limited by the absence of total regional spend data for each region. RTE data is primarily limited by low timeliness in publication. Because it draws on data from the TSA, the annual publication is not released until 8 months after the end of the reference year.
- Because RTI data is presented as an index, interpretation of monthly patterns is currently not a straightforward process, however there is a video provided on the website indicating how customers can interpret the data.

- The RTI and RTE are not Tier 1 (nationally important) statistics.

Integrity

- Detailed sources and methods information is available for both the RTEs and RTIs on the website. These documents also discuss a number of limitations relating to the two series.
- For the RTIs, there is also a report on the validity of the RTI data.
- Compilation and release of the data is impartial and objective.

Quality

- The RTI and RTE statistics are fit for use. They are timely and the methodology is constantly being refined to improve accuracy.
- Documentation is available on the methodology and development of the RTE and RTI statistics.
- Challenges to the quality of the data primarily relate to the coverage of ECT data – some markets and some industries make less use of electronic transactions. These coverage issues are likely to change over time, and will need to be closely monitored. Within MBIE, the procedure for data analysis and dissemination is clearly documented, and would be straightforward to follow if a new analyst needed to take over the process.

Coherence

- Despite both being based on ECT data, there is a discrepancy in the way the RTIs and RTEs are published. RTIs are presented as an index, while RTEs are presented as spend values.
- Automated processes and methods are used where possible, to maintain the objectivity of the statistics.

Accessibility

- Access to RTE and RTI data is provided through MBIE's website, and a release calendar indicates when new data will be published.
- The website links to pivot tables with the RTE and RTI data, and instructions on how to use these tables is clearly provided (including an excellent instructional video on using the RTI pivot tables). This enables customers with a range of skill levels to access the data they desire.
- There is little commentary published with the RTI and RTE releases, although a few key charts are published alongside the pivot tables. Commentary is more likely than aggregated data to get uptake from mainstream and social media.
- There is an interactive chart for the RTE data, but this is likely to present too much information for the casual customer.
- Little dissemination occurs beyond the website (eg media releases, customised data).

Efficiency

- There is a very quick turnaround between the time when data is received and when it is published. The RTIs are published within a month of the reference period, and the RTEs are published within a month of the TSA release.
- For the RTIs, some timeliness could be sacrificed for greater depth of analysis, which could increase the value of the data.

Protecting respondent information

- There is little risk to respondent information, as MBIE only receives aggregate data from Marketview, and it is impossible to identify individual people or businesses from their data.

Minimising respondent load and maximising existing data sources

- The RTIs and RTEs use administrative (ECT) data, therefore, respondent load is not an issue for these statistics.
- The RTEs incorporate data from two other sources—IVS and TSA—thereby maximising value from existing data.

International participation

- While many countries compile estimates of tourism spending based on survey methods, the use of ECT data to indicate regional tourism spending patterns is world-leading. The IVS is similar to inbound passenger surveys conducted overseas.

Progress made against Tourism Domain Plan recommendations

A greater emphasis on regional data is a key feature of the tourism domain plan. Recommendation 2 from the Tourism domain plan outlined the goals for regional indicators:

Recommendation 2: Develop regional indicators of tourism from alternative data sources.

- Develop a set of regional tourism indicators to replace the DTS. This might include domestic electronic data transactions, some form of CAM, collection of tourism attractions and an activity monitor (eg the Rotorua activity monitor) and usage of regional infrastructure (conservation estate/concession data).
- Retain the DTS in its current form until the regional indicator series is established and the TSA methodology is revised (approximately 2–3 years)

In 2012, MBIE successfully published regional spend indicators – RTIs and RTEs – using electronic card transaction data. These indicators provided information on both domestic tourism spend and international tourism spend. Currently, the RTE and RTI tourism spend data is not integrated with other regional tourism data – accommodation data, tourism attraction data, activity monitors, concession data – when it is published on the website. However, periodically, RTE and RTI data is presented in *The New Zealand Sectors Report*, and *Regional Economic Activity Report*. Due to concerns with the quality of source data, MBIE stopped publishing the DTS in 2012.

Other quality aspects

The main strength of the RTIs is that they provide a timely indicator of tourism activity at the regional level, which is much more useful to tourism providers than aggregate measures that are published less frequently. This data can also provide useful information on large one-off events that are likely to attract tourists (eg the Rugby World Cup), and it also has the potential to inform policy decisions, estimates of economic activity, and economic forecasting. The RTIs and RTEs are currently published to a high standard, and provide data that is useful and sought-after, without high respondent burden. There are a number of possible improvements to the series that would further enhance the quality and utility of the data, and as part of their internal review MBIE is considering these avenues for improvement.

Two areas in which the regional tourism series could be substantially improved are to reconcile monthly movements with annual RTE estimates, and revise time-series data on a monthly basis. These modifications are already being considered by MBIE as part of their internal review.

Reconciliation with total spend

Unlike the RTE data, the RTI data are currently presented as a monthly index, rather than total monthly spend in each region. This is because data on total regional spend is only available annually, so the RTI data only gives information on monthly movements in regional spend, rather than levels. Reconciliation of monthly movements with annual RTE estimates could give a good approximation of monthly levels. When new TSA and IVS data becomes available, their incorporation would likely result in a shift in levels, but the pattern of monthly movements is likely to be more stable.

Time series

Every month, Marketview make small changes to the sample, to improve accuracy. These changes reflect structural changes to the companies providing the electronic card data, or revisions to the way the data is coded. When data is coded in a different way, Marketview change the entire time series to reflect the new coding. In contrast, MBIE only loads the latest month's data, which can result in breaks to the time series. These breaks could be avoided if MBIE loads the whole time series every month. If revisions were to be made to the time series on a regular basis – to incorporate the latest IVS and TSA data, and any coding revisions from Marketview – there would need to be an accompanying document outlining the size and cause of the revisions.

Two lower-priority improvements MBIE could consider are seasonal adjustment and inflation adjustment. Currently, considerable effort is put into the timeliness of the RTI data, and the monthly series is published within four weeks of the end of the reference period. However, because the series are not seasonally adjusted, trends in the data are analysed on a rolling annual basis, so there will be a lag before turning points show up in the data. However, a potential pitfall with publishing seasonally adjusted data is that customers may not be familiar with seasonal adjustment, and how to interpret it.

A second improvement MBIE could consider is adjusting for inflation. Currently the RTI series are not adjusted for inflation, so what appears to be an increase over time may actually reflect price increases. We are currently investigating constant price spend estimates for the tourism satellite account. Further down the track, these estimates could flow through to constant price RTE and RTI estimates.

MBIE could seek training in the techniques that are not commonly used in MBIE statistics. This training could include topics on seasonal adjustment, inflation adjustment, annual benchmarking, and methods for working with time series.

Stakeholder views on the RTIs and RTEs

Although the RTIs and RTEs are relatively new tourism data products, they were identified by stakeholders as highly important to understanding New Zealand tourism. Stakeholders we spoke to stress the importance of fine-grained regional tourism data to government and tourism industry decision making.

One concern that a number of stakeholders voiced was with gaps in the coverage of ECT data. In particular, cash payments and online purchases are not covered in the ECT data. The proportion of cash payments and online purchases is likely to vary by industry, and also by tourist country of origin. Several of the stakeholders we interviewed requested published analysis of the ECT coverage for different tourism sectors and countries of origin. A desire for greater transparency over the methodology used to generate final RTI and RTE estimates was also mentioned several times.

Areas for improvement for RTI and RTE statistics

Here are suggestions for improvement MBIE could consider within a cost benefit framework.

- Expand on the dissemination of the RTI and RTE data by providing a commentary to accompany the data releases. A commentary would make the information accessible to a wider audience, and could cover any interesting patterns emerging in the data and other regional tourism indicators for the same period.
- Publish provisional estimates of total regional expenditure on a monthly basis. These estimates could be achieved by reconciliation with annual total spend data, and would greatly enhance the utility of the monthly data.
- Enhance transparency by publishing documentation on any errors or revisions that have been made to the source data provided by Marketview. This will become increasingly important if the whole time series is to be updated every month, and if estimates of total expenditure are to be provided on a monthly basis.
- Consider publishing a one-off discussion paper on coverage issues, indicating whether some markets and some industries are not well covered by ECT data.

6 New Zealand tourism outlook (forecasts)

The tourism forecasts are one of MBIE's products as part of its tourism statistics. MBIE asked NZ Institute of Economic Research (NZIER) to create the model for the forecasts in 2012 – NZIER has been creating the forecasts ever since, although MBIE adds policy input to the modelled data and writes the report that accompanies the forecasts. In 2015, MBIE will do the whole process in house – from creating the model to producing the report. NZIER will review the model.

The forecasting model uses data from a number of sources, including input data from the Reserve Bank of New Zealand, World Bank, and Federal Reserve Economic Database, as well as tourism data from MBIE's own International Visitors Survey and Statistics NZ data.

The forecasting model makes predictions for seven years into the future, because the methodology used is good for such medium-term forecasts. Stakeholders are keen for a 6-12 month outlook, however this may require a different model that is better for short-term forecasts.

The types of data used when MBIE takes over the creation will be the International Visitor's Survey, International Travel and Migration from Stats NZ, as well as external data such as international stock prices. As well as incorporating international stock prices, MBIE could include sources that weren't available when the first model was created. Creating the forecasts in house will help MBIE to better understand the drivers for change by increasing the analysis they are able to do.

Review of tourism forecasts against Tier 1 principles

Here is our assessment of tourism forecasts against the nine tier 1 principles.

Relevance

- Each year, MBIE reviews the forecasting process with NZIER and looks at lessons learnt (eg methodologies, dissemination) that feed into improvements for the next year.
- The forecasts are adaptable to some external demands. For example, the latest report added information about India and Indonesia. There was also demand for information from South America. Some South American information was released that was deemed of sufficient quality.
- The tourism forecasts are not Tier 1 (nationally important) statistics.

Integrity

- The methodology to create the forecasts is documented by NZIER and published alongside the forecasts on MBIE's website. This provides information on the data sources, methodology for the model, and a quality assessment of some of the results.

Quality

- When MBIE take over the model it will be created from scratch. It will be designed to start as a naïve simple model and become more complex from there. NZIER's technical report showed there was not much change in the mean squared error between a simple model and the advanced model. However, the advanced model adds more sophistication.
- R scripts are peer reviewed and it is easy to identify the particular problem when the program doesn't run properly because of the different scripts for each data

source. The model mainly relies on the IVS and ITM data – external data has less weight in the model. So the risk of external data changes (formats etc) are mitigated by this.

- Code is documented in a best practice method.
- Not all information that has been asked for has been released, as some has been deemed not to be fit for use based on the current model. Stakeholders have high demands for the products and are always looking for more detail. For example, they would appreciate regional forecasts, as the current forecasts are all at the national level.

Coherence

- Variables that are forecast have the same definitions as those from the IVS and other tourism outputs.

Accessibility

- The report attempts to help customers understand the quality of forecasts in a number of ways. The foreword includes the caveats such as they are a baseline if things keep going this way and that they are not targets. The report also includes some sensitivity analysis by presenting alternative scenarios – in the most recent example a slowdown in China's growth and oil prices slumping then recovering. The report also uses wording to present the results are estimates or predictions, rather than reality.
- Currently nothing is published that compares forecasts from previous years to reality. This could be done in future when the modelling is brought into MBIE. A possible chapter in a future report could compare the old forecasts to reality and explain the changes that resulted in a difference. These factors may be able to be added to the model. This would also help with customer understanding of the quality of the forecasts.
- Confidence intervals are not presented on graphs in the report. This would also help customers understand the variability around the forecasts, especially where opinions in the moderation committee differ. This was mentioned in MBIE's technical report in 2012.
- Media release is published at the same time as the report goes online. It is picked up by tourism associations etc. However there is no social media advertising.

Efficiency

- The code for the report is written in R and Latex so the numbers can be automatically put into the report when data is updated. Since it is all automated the report could be produced more regularly as data sources are updated.

Protecting respondent information

- Data used is only published data and there is no unit record information used.

Minimising respondent load and maximising existing data sources

- The data used for the tourism forecasts is all existing data, none is collected purely for this purpose.

International participation

- NZ's tourism forecasts are comparable with those produced by Australia. Some best practice is shared between the two countries.

- There are no known standards internationally. However, there are other forecasting teams in MBIE (eg Energy) who will be used for peer review of the model and this support could be expanded.

Progress made against Tourism Domain Plan recommendations

Here is the progress MBIE has made against recommendation 12 of the tourism domain plan.

Recommendation 12: Improve the methodology of forecasts so that they provide best and worst case options, incorporate more international future-focused information, more information on emerging markets, and provide access to real-time bookings.

- The forecasting methodology needs to be improved to contain updated/modelled actuals for the previous year, a regional breakdown for the previous year, a forecast for the next five years to include best and worst case scenarios, a forecast for next five years of the top 10 markets, a case study of selected emerging markets, and information from forward bookings.
- Alignment of the tourism year – forecasts currently use a calendar year, while TSA uses the year ending in March, and IVS/DTS is published quarterly for the year ending in that quarter.
- Any publication should be explicit about the modelling done and the assumptions used (exchange rate, price of fuel, economic conditions etc).
- Investigate the feasibility of doing different periods of forecasting – for example two-year forecasts every six months and 10-year forecasts every two years. Need to consider how different they would be from the five-year forecasts and what the implications would be on the methodology.

Out of the suggestions from the Tourism Domain Plan the first and third bullet points (improving forecasting methodology and being explicit about modelling done and assumptions used) have been implemented. However the other bullet points (aligning the tourism year and looking at different periods of forecasting) have not been implemented.

Other quality aspects

A technical moderation committee looks at the preliminary model and has the ability to make adjustments to the model based on their own privately held data, own judgements and expert analysis. These changes are documented in the published report. Customers have a lot more trust in the forecasts because of this group's input.

Stakeholder views on the tourism forecasts

The stakeholders we interviewed found MBIE's tourism forecasts to be very useful for guiding investment decisions and policy. Overall they felt positively about the quality of the forecasts, but wanted to see more published validation information, and there were instances when MBIE's forecasts did not match up with forecasts produced by the industry. They stressed that the forecasts can only be as good as the data that inform them, so improvements in MBIE's other tourism statistics would in turn benefit the forecasts.

Areas for improvement identified by the stakeholders we interviewed included producing regional tourism forecasts and medium-term forecasts.

Areas for improvement for tourism forecasts

Here are suggestions for improvement MBIE could consider within a cost benefit framework.

- Investigate the remaining suggestions from the tourism domain plan:
 - align the tourism year used in forecasting with the TSA and IVS tourism year
 - look at different periods of forecasting.
- Once MBIE has taken over the production of the forecasts, publish information more regularly about data quality, including data sources, methods, and validation of the forecasts.

7 Domestic Travel Survey and Resident Travel Survey

MBIE took over the Domestic Travel Survey (DTS) in 2008, but discontinued it in 2012. In its place, MBIE collect data on domestic tourism expenditure with their Regional Tourism Indicators and Estimates (RTIs and RTEs).

The DTS was a telephone survey of approximately 15,000 households per year, which was used to estimate the characteristics of New Zealanders' domestic tourism (activities, transport, accommodation types used, places visited, tourism spend, purpose of visit). Respondents were asked to recall overseas, overnight or day trips taken in the last four (at Christmas, five) weeks prior to the interview. From July 2008, the Ministry of Economic Development (subsequently MBIE) managed the survey, and outsourced the data collection.

The variables included in the DTS are difficult to measure accurately via a telephone survey but there were no alternative comprehensive sources of data. The DTS was an ambitious and extensive survey. It relied on respondents cooperating during a lengthy phone call and being able to accurately and promptly recall details across a reasonably lengthy time period. Because the data was collected at such a low level, the survey was large and expensive to run. The high cost of the survey and concerns with data quality led to the cessation of the DTS in 2012.

In place of the DTS, MBIE collect data on domestic tourism expenditure with their Regional Tourism Indicators and Estimates (RTIs and RTEs). MBIE are also working on developing a Resident Travel Survey (RTS), using data on overnight visitor trips to give an estimate of domestic tourism volumes.

Overnight visitor trips data has been collected on contract by Roy Morgan New Zealand since late 2012, as part of a larger omnibus telephone survey. As of April 2015 the survey moved to a web-based collection with a sample size of 12,000. Prior to April the sample size was approximately 25,000 per annum (slightly over 2,000 respondents per month). The survey used to be telephone based collection using computer assisted telephone interviewing (CATI), and respondents were recruited from landline numbers and random digit dialling of mobile numbers.

Respondents are asked for information on overnight or longer trips, at least 40km from home, taken in the last four weeks prior to the interview.

Data is collected on:

- number of trips
- number of nights away
- purpose of the trips

No data is collected on the destination of the trips, mode of transport, accommodation type, or travel spend. The survey is therefore not a complete replacement for the discontinued DTS. It is also subject to the previously-encountered issues of high cost and low data quality associated with low-level data collection by telephone.

The RTS has never been published, due to concerns with the quality of the data. Little information about the RTS is available on the MBIE website. The Ministry is currently working to resolve estimation and analysis issues relating to the RTS, and at present no final publication data has been announced.

Review of the RTS against Tier 1 principles

Here is our assessment of the RTS against the nine tier 1 principles.

Relevance

- The RTS has the potential to provide useful information on domestic tourism but has data integrity issues and doesn't include destination information.
- The RTS has never been published and is not a Tier 1 (nationally important) statistic.

Integrity

- Poor integrity. There are marked inconsistencies between the RTS, the historical DTS, and the domestic component of the Accommodation Survey.

Quality

- Concerns with the quality of the RTS data have prevented its publication to date.
- The response rate to the Roy Morgan survey is reportedly poor.

Coherence

- The overnight travel data is not easily aligned with domestic tourism expenditure data.
- The data is on an 'origins' basis rather than a 'destination' basis: we know from the survey where the travellers live but we don't know where they spend their time away from home.

Accessibility

- The overnight travel data is currently not published, and there is no publically available information on the timetable for the production of a domestic tourism series.

Efficiency

- The efficiency cannot be assessed because it has not been published.

Protecting respondent information

- No reported issues.
- Data is collected as part of a larger survey conducted by Roy Morgan.

Minimising respondent load and maximising existing data sources

- The overnight travel data is collected as part of a higher-load omnibus phone survey.
- The ceased DTS involved a high level of respondent burden. The overnight travel component of the Roy Morgan phone survey is far less detailed, but respondent burden is significantly reduced.

International participation

- Similar surveys conducted overseas could be used as a template, for example the national visitor survey conducted by Tourism Research Australia.

Progress made against Tourism Domain Plan recommendations

Recommendation 2 of the Tourism Domain Plan recommended replacing the DTS with other indicators of tourism expenditure and activity:

Recommendation 2: Develop regional indicators of tourism from alternative data sources.

- Develop a set of regional tourism indicators to replace the DTS. This might include domestic electronic data transactions, some form of CAM, collection of tourism attractions and an activity monitor (eg the Rotorua activity monitor) and usage of regional infrastructure (conservation estate/concession data).
- Retain the DTS in its current form until the Regional Indicator Series is established and the TSA methodology is revised (approximately 2–3 years).

Developing RTIs and RTEs in 2012 successfully replaced the DTS as a good source of domestic tourism expenditure data. Unfortunately, concerns with the quality of DTS data meant that it ceased to be published before MBIE could develop suitable alternative indicators of domestic tourism volumes.

Stakeholder views on the RTS

The lack of information on domestic tourism volumes was a key point raised by several stakeholders. While the RTEs and RTIs are innovative and provide useful information on domestic tourism expenditure, tourism industry stakeholders are also often interested in the numbers of domestic tourists in different regions in New Zealand. However it is difficult to obtain comprehensive data on these domestic tourist numbers. There is no adequate source of data for this.

In the absence of any suitable data source, stakeholders often use commercial accommodation monitor (CAM) data as an indicator of domestic tourism volumes on which to base policy and investment recommendations. Stakeholders are aware of coverage issues for CAM data, and do not believe the data is well suited for this purpose. Domestic tourist numbers are unlikely to become Tier 1 statistics.

Areas for improvement for RTS statistics

Here are suggestions for improvement MBIE could consider within a cost benefit framework.

- Complete the investigation into the validity of RTS data, and determine whether an alternative measure needs to be developed.
- Publish an update on where things stand with the publication of RTS data on the MBIE website.

8 Convention Activity Survey and Convention Delegate Survey

The Convention Activity Survey (CAS) and Convention Delegate Survey (CDS) together provide the data for MBIE's Convention Research Programme. The programme began in 2009, with two main objectives:

- to monitor meetings, incentives, conferences, and exhibitions (MICE) activity in New Zealand
- to estimate the contribution multi-day conventions make to the New Zealand economy.

The CAS is a quarterly survey of professional meeting and conference venues in New Zealand. Data comes from businesses that host multi-day events – meetings, seminars, incentive activities, conferences, conventions, trade shows, exhibitions, and special occasions- in 13 participating convention bureaux. Data is aggregated by region, nature of event (type, size, and length), number of events, number of delegates, origin of delegates, and delegate days.

The CDS is an annual online survey of approximately 2,500 multi-day convention delegates. Data is aggregated by origin of delegate (local, domestic, Australia, other international), expenditure, and visitor nights. In 2013, the CDS was substantially revised, causing a break in the time series. Spend estimates for the new series align with the IVS. For both the CAS and CDS, MBIE commissioned Malatest to collect the data. Malatest process the raw data, and impute missing data. MBIE receive processing notes from Malatest, but do little in the way of checking data after receiving it.

Both of these surveys serve niche sectors of the tourism industry. From a statistical system perspective, it is unlikely that such niche surveys would be considered to be statistics of national importance.

Coverage

The convention research programme receives data from 13 of the 19 convention bureaux in New Zealand, including bureaux in all the major centres. Participation in the CAS is voluntary, and coverage fluctuates considerably between quarters, especially at the regional level. The respective convention bureaux provide capacity data for all venues in the region. Missing data is imputed by identifying the venues that did not provide data, and using the average of their five 'nearest neighbours' based on capacity data, region, and venue type. For the CDS, a sample of roughly 2,500 convention delegates is weighted up using (a) CAS annual totals for domestic delegates, and (b) IVS conference/convention attendees for international delegates.

Review of the CAS and CDS against Tier 1 principles

Here is our assessment of the CAS and CDS against the nine tier 1 principles.

Relevance

- The CAS and CDS are niche products, primarily of interest to the convention industry. The main customers of the data tend to be members of the various convention bureaux, and sometimes other tourism industry stakeholders.
- There is low interest from central and local government, the absence of information on delegate spend per region likely limits how informative CDS data will be for local government especially.

- There has been little customer feedback received, although there are occasionally requests from convention industry stakeholders for more fine-grained data. MBIE have not looked at the website analytics to determine how much the data is used.

Integrity

- Methods used to produce these statistics are not clearly documented on the website.
- There is no published data on the reliability and validity of the statistics.
- The CAS and CDS are not Tier 1 (nationally important) statistics.

Quality

- It is difficult to ascertain the quality of these statistics, as there is little available information on methodology and data sources.
- Different venues respond every month to the CAS, so the sample is constantly changing. Response rate is assessed with reference to a master list of venues provided by the convention bureaus.
- MBIE and Malatest discuss the events that Malatest remove from the sample each quarter, but the dataset is considered to be straightforward, and there is no extensive checking process for the input data.
- Data presented in the final report is checked against data stored in the database.
- Processing the data is largely automated, an R-project is used to prepare tables and plots. The text and commentaries are modified manually.
- The largest threat to the quality of the statistics comes from the weighting process. A significant portion of the data needs to be imputed for missing values.

Coherence

- The CAS and CDS provide statistics on the supply of convention services (CAS) and demand for these services (CDS).
- The CDS was re-designed in 2012 to be more consistent with IVS measures of visitor spend.

Accessibility

- Data from the CAS and CDS are made available to the public shortly after the end of the relevant period.
- CAS data is clearly presented, and able to be easily customised using the pivot table on the website.
- Only a summary report (no data file) is produced for the CDS, and data is not as clearly presented as it could be.
- Delegate spend by region is a notable absence in the CDS.
- Both CAS and CDS reports are peer reviewed by convention industry members before release. Feedback tends to be more 'story-focused' rather than data-based.
- Little is done in the way of analysis beyond the presentation of aggregate data.

Efficiency

- MBIE does not invest much time in the production of these statistics, but they pay Malatest for the data.

Protecting respondent information

- No reported issues.
- MBIE do not publish data at a level where individual delegates or convention venues can be identified.

Minimising respondent load and maximising existing data sources

- These surveys entail considerable respondent load, and in the case of the CDS, the output is not likely to be of interest to the respondents.
- Data is collected specifically for the purposes of the CAS and CDS releases. The CDS uses the CAS to weight survey data up to the population.

International participation

- The data MBIE collect on convention activity and attendance appears to be considerably more extensive than data collected by government organisations overseas.

Web analytics and level of interest in CAS and CDS

These surveys cover activity of a small sector of the tourism industry. Use of the two surveys is apparently low, and limited to the convention bureaux from which the data is sourced. It would be worth looking at website analytics, to get a better indication of the level of interest in the surveys, and then reviewing the CAS and CDS, to determine whether they are still high-priority statistics.

Although MBIE's time investment in the production of these statistics is small – they outsource the data collection to Malatest – there is considerable respondent burden on the part of the convention centres and convention delegates who provide data. Halting the production of these two surveys would allow resources to be re-allocated to areas where there are likely to be greater returns from increased investment (eg developing regional tourism statistics). It would be worth considering whether these statistics would be better administered by the convention industry, rather than by MBIE.

There is currently little information available on the validity of the data, and no description of the processes used by Malatest to check the accuracy of the data. Therefore it is difficult for customers to gauge the quality of the data. However, we believe improvements to other tourism statistics – in particular the RTIs – should take precedence to any work on the convention statistics.

Progress made against Tourism Domain Plan recommendations

Recommendation 18 of the *Domain Plan* discussed the continued need for convention data, and proposed a number of improvements to the methodology and dissemination process.

Recommendation 18: Continue collection of convention data as supplementary to the IVS.

- Extend the life of the CAS survey by 3–5 years (needs to run until the National Convention Centre is established and at least two years after). Improve the reporting of the CAS to make it more understandable and provide more access to the data to allow further analysis, including a quarterly and annual time series. Consideration should be given to reporting year-on-year and month-on-month.
- Investigate the potential to collect the data by convention type and whether quarterly future bookings can be monitored.

The convention research programme began in 2009, so the target of 3–5 years of further data collection has been met. However, due to a number of setbacks, the National Convention Centre has still not been established. Quarterly CAS data is readily accessible in a pivot table provided on the website, and annual data is presented in a quarterly commentary. Data is available on convention type, but no data is available on future bookings.

Stakeholder views on the CAS and CDS

Several stakeholders we interviewed considered the CAS and CDS data to be relevant, and they pointed out that conventions are a target area for tourism 2025. However, most stakeholders found other data MBIE produces to be more relevant.

The stakeholders also mentioned a number of concerns with the quality of CAS and CDS data. They were concerned with anomalies in CAS data at the regional level, potentially due to sampling inconsistencies between quarters. They also requested much more published methodology information, especially for the CDS.

Areas for improvement for CAS and CDS statistics

Although improvements could be made to the CAS and CDS statistics, these are not a high priority compared with other improvement to tourism statistics that MBIE is currently working on, especially in regards to the niche area of these collections.

However, we suggest MBIE could:

- conduct a cost-benefit assessment of the convention research programme to determine whether it is worth continuing to produce the CAS and CDS, at the cost of improvements to some of the more widely-used tourism statistics.

9 Meeting customer needs

The relevance principle requires that official statistics are relevant to current and prospective customer requirements, in government and in the wider community (Statistics NZ, 2007).

To assess the relevance of the current suite of tourism statistics offered by MBIE, members of the review team interviewed members of a number of organisations who are high users of official tourism data:

- Tourism Industry Association NZ
- Regional Tourism Organisations NZ
- Auckland University of Technology
- Lincoln University
- Angus and Associates
- Maori Tourism Board
- Statistics New Zealand.

The review team also attended a meeting of the Tourism Domain Industry Reference Group. Stakeholder feedback was sought on the following topics:

- The value and utility of MBIE's tourism statistics.
- The quality of the statistics.
- Desired improvements and additions to the suite of statistics.
- The presentation of the statistics (level of aggregation, ease of finding relevant data).

We believe MBIE's tourism stakeholders are well catered for. Stakeholders find that the data produced by MBIE is highly relevant and are able to make good use of the data to inform their decision making and provide information to their clients.

Feedback from the stakeholder group indicate they use all data on the tourism industry that is available to them. The stakeholder group is very supportive of MBIE's focus on further development and improvement of the current range of tourism statistics. One area in particular is the RTIs. These provide a key piece of demand side information on the tourism industry at the regional level, which is an area that is often missing in other goods and services measures.

Stakeholders acknowledged that MBIE has worked hard in the last few years to build up relationships with the stakeholder group and understand their needs. One key way that most stakeholders are engaged with MBIE is through the Tourism Domain Industry Reference Group, which meets regularly throughout the year. MBIE uses this as a vehicle to update the stakeholders on development progress, providing further analysis on recent releases, and to get stakeholder feedback so MBIE can continue to meet their needs.

Stakeholders also acknowledged the hard work that MBIE has undertaken to build industry knowledge and analytical capability since the suite of tourism data moved to the then MED from the Ministry for Tourism. Stakeholders appreciate that tourism statistics now sit within a Ministry that has as its' main focus the economic development of New Zealand, which includes the tourism industry.

MBIE has made progress on improving the suite of tourism statistics, which the stakeholders are pleased with. In part this has been made possible by the development of the Tourism Data Domain Plan and focusing work on the high priority recommendations. The recommendations were a result of extensive consultation with stakeholders.

As part of our review, stakeholders provided feedback on areas for future improvement, most of which can be categorised under a desire for increased communication. We acknowledge there may be some benefit to stakeholders if communication is increased, however, this needs to be weighed up against other competing priorities for the limited resource that MBIE has available for tourism statistics.

MBIE is currently focusing on dissemination methods for tourism statistics, in particular taking advantage of new technology to showcase data and information (SHINY), which is being implemented across the suite of tourism statistics.

[See appendix 4](#) for further information on stakeholder feedback.



10 Progress made against the tourism data domain plan

By the time of our review, in mid-2015, a considerable amount of progress has been made against the recommendations outlined in the tourism domain plan. MBIE have implemented the three highest-priority initiatives, including redeveloping the IVS, developing regional tourism indicators, and improving the forecasting methodology. The development of the regional tourism indicators and estimates in particular has been a big success, with many stakeholders highlighting this data as extremely relevant. In the intervening time, MBIE have also made improvements to their tourism datasets that did not form part of the tourism domain plan recommendations.

Some recommendations from in the tourism domain plan have not progressed much. These include developing tourism business economic indicators and a cruise series. Some stakeholders also felt that there hasn't been much progress on Māori tourism statistics, but these have now been incorporated within the Statistics NZ release, Tauranga Umanga Māori, in partnership with New Zealand Māori Tourism and MBIE.

Tourism business economic indicators

One of the high-priority work streams resulting from the tourism data domain plan was to provide more information on tourism businesses to gain an understanding of their growth, innovation, productivity, and efficiency. The stakeholders we spoke to thought information on the performance of tourism businesses would be valuable, in order to tailor support and intervention packages to assist in developing and maintaining the health of the industry. This is an area where MBIE could partner with other agencies including Statistics New Zealand.

Cruise series

The tourism domain plan recommended developing a cruise passenger expenditure series. This would be useful for cruise industry stakeholders, and as an input into economic statistics. There doesn't appear to be any progress on such a series. However these statistics would only be useful for a small subsector for the tourism industry. We acknowledge that the development and collection of cruise series data is likely to be challenging and there are higher priority improvements to the tourism suite that take precedence.

Māori tourism statistics

The tourism domain plan highlighted the need to identify and measure Māori tourism – tourism products and services relating to aspects of Māori culture, and tourism businesses owned by Māori – within each of five topic areas:

- the value of tourism
- the growth, innovation, productivity, and efficiency of tourism businesses
- the value of government interventions
- global competitiveness
- the sustainability of New Zealand tourism.

Questions on Māori tourism are now included in the IVS, although there are concerns about the degree to which international visitors would be able to identify Māori tourism experiences. The stakeholders we spoke to did not feel much progress had been made in this space.

The future of the Tourism Data Domain Plan

We recommend that MBIE re-visit the remaining tourism domain plan recommendations to determine which are still relevant, and which are unlikely to be a priority in the near future. It would be useful to publish a document outlining MBIE's plans for future improvements, in addition to being provided to stakeholders at the Tourism Domain Industry Reference Group meetings. This would ensure that other interested sections of the tourism industry are kept informed.



11 Delivery of tourism statistics

One objective of this review was to consider delivery options for the programme beyond the current arrangements, which entail MBIE delivering all the data collections apart from three – Tourism Satellite Account, International Travel and Migration, and the Accommodation Survey – which are produced by Statistics NZ.

Our review team is not qualified to make recommendations on the future placement of the suite of tourism statistics. Instead, we outline some of the key considerations when considering where statistical production should occur.

- Since MBIE took over the production of the tourism statistics they have built up extensive expertise on the sector. This expertise allows MBIE to focus on improving its statistics and take advantage of new tools and technology. Another agency is unlikely to have the same level of expertise in tourism statistics produced by MBIE.
- Over the past five years, MBIE has developed a good team culture with a focus on continuous improvement and is in a position to take advantage of new technologies and opportunities with agility and speed. MBIE is well placed to continue with this focus.
- MBIE has been able to adopt a number of systems to help develop and disseminate the tourism statistics. These tools allow MBIE to automate the processing and analysis of many of their statistics. The use of these tools decrease error due to less manual human intervention and greatly increases efficiency in production. MBIE is in the development stage of implementing new software in the dissemination of tourism statistics.
- Due to the adoption of the tools mentioned above, MBIE is able to produce and disseminate tourism statistics with very limited resource. If the tourism statistics were to be produced by another agency, resource levels would need to be greater in the short-term, not only due to potentially less efficient technology being used, but also to reflect the lesser degree of expertise.
- The stakeholders the review team interviewed felt that economic growth is central to MBIE's organisational purpose, and it is a goal that MBIE shares with customers of tourism statistics. Customers were concerned that other agencies may have less alignment in priorities, and reduce non-Tier 1 tourism statistics.
- MBIE has already built up relationships with customers of its respective datasets. These relationships could be negatively affected if there is a change in the organisation responsible for producing the statistics.
- Currently, tourism data is produced by both MBIE and Statistics NZ. Customers of tourism data need to know how to access data from both organisations, and must build a relationship with both organisations if they want input into the production of the statistics.
- A number of issues would need to be considered if the tourism statistics were to move. These include, but are not limited to, questions around funding. It is likely that the receiving agency would face increased costs to produce tourism statistics compared with MBIE, at least in the short-term.
- The review team acknowledge there are opportunities for Statistics NZ and MBIE to work more closely together to produce and disseminate tourism statistics. For example, our organisations could work more closely on the dissemination of the IVS to better communicate the validity and evidence of the quality of the data. Statistics NZ could support MBIE in the development of a regional domestic tourism volumes series. Statistics NZ could provide support in working through the challenges MBIE faces in this area.



12 Key recommendations

Recommendation 1: MBIE better communicate the validity and evidence of the quality of the data, particularly for the International Visitor Survey and Regional Tourism Estimates. MBIE could also consider adding a context for the data and analysis. This would provide customers greater confidence in the quality assurance processes and understanding of the information.

Recommendation 2: Communicate any change to a release date to stakeholders as early as possible. This enables stakeholders to change their work programme to accommodate any delays.

Recommendation 3: Continue work on developing a regional domestic tourism volumes series until they are of sufficient quality to publish. We understand the challenges MBIE faces in this area and agree with its decision to not publish data until it is confident in the quality. The continued development and subsequent release of regional domestic tourism volumes would fill a remaining gap in MBIE's suite of tourism statistics.



References

Ministry of Business, Innovation and Employment (2011). [Tourism data domain plan](#). Retrieved from www.mbie.govt.nz.

Statistics New Zealand (2007). [Principles and Protocols for Producers of Tier 1 Statistics](#) (PDF) Retrieved from www.stats.govt.nz.

Statistics New Zealand (2012). [Tier 1 Statistics 2012](#). Retrieved from www.stats.govt.nz.



Appendix 1: Terms of Reference for the Review of MBIE Tourism Statistics

April 2015

Purpose

The purpose of this review is to assess and identify means of improvement for the quality of the systems and processes used to produce MBIE's tourism official statistics. The review will consider the progress that has been made against the 2011 Tourism Domain Plan.

Background

Reviews of subject matter statistics are undertaken by the Government Statistician from time to time to review aspects of official statistics good practice. The Ministry of Business, Innovation, and Employment (MBIE) completed a review of its programme of official tourism statistics in 2011. The first tranche of recommendations of that review have now been implemented and MBIE now wishes to consider delivery options for the programme beyond the current arrangements, which entail MBIE delivering all the data collections apart from three (Tourism Satellite Account, International Travel and Migration, and the Accommodation Survey). The tourism statistics MBIE currently administer are:

- The International Visitor Survey (IVS)
- Regional Tourism Indicators
- Regional Tourism Estimates
- Convention Delegate Survey
- Convention Activity Survey
- New Zealand Tourism Outlook ('forecasts')
- Resident Travel Survey.

Among other things, the options would need to take into account the need to assure and sustain the quality of the part of the programme that delivers Tier 1 statistics. Tier 1 statistics are those needed for the most important decision making in New Zealand, and the list of Tier 1 statistics was approved by cabinet in 2012. However, the scope of the review covers all the tourism series produced by MBIE including those that are not Tier 1.

The focus of this review is on answering the following questions:

- How well is the current suite of tourism statistics meeting the needs identified in the 2011 Tourism Domain Plan?
- Are the right infrastructure, systems, and processes in place to sustain the efficient production of tourism statistics to the quality required?
- What reasonable options exist to ensure efficient and sustained delivery of these statistics, including but not limited to transfers of responsibility and resources for their production?
- What other areas might need improvement, and what lessons can be learned?

Scope

- The review will include the programme of statistics covered by the 2011 Tourism Domain Plan, which are produced by MBIE.

- The current production arrangements will be assessed against critical elements of the Principles and Protocols for Tier 1 Statistics. Even for collections that are not Tier 1, the Principles and Protocols provide a useful benchmark.
- It will consider whether the right quality assurance systems are already in place, and that statistical best practice is being followed.
- It will give consideration to alternative production or delivery arrangements for tourism statistics.
- It will include talking to the tourism industry about perceived progress against the Tourism Domain Plan.

Scope exclusions

- It will not revisit the content of the Tourism Domain Plan, as this process has already identified needs for the sector.
- It does not purport to be a quality audit and will not provide certification of the quality of the tourism statistics or the methodologies used.
- The review will not consider any statistics outside of the current suite of tourism statistics that MBIE produces or has immediate plans to produce.
- The review will not consider any processes or systems that are not directly related to the production of statistics.
- The current funding arrangements for Tourism statistics are out of scope for this review.

Membership

The review will be conducted by a small team from Statistics NZ, comprising:

- Paul Brown, Principal statistician
- Meighan Ragg, Price Development Manager
- Andrew Black, Statistical methodologist
- Morgan Sissons, Keely Betham, Angelique Klinkers, John Gudgeon, Statistical analysts.

The key MBIE contacts for the Statistics NZ team to liaise with, in order to conduct the review are:

- Peter Ellis, Manager Sector Performance
- Jacob Sankey, Senior Analyst

The team will engage with the Sector Performance team at MBIE, and be given appropriate access to relevant documentation and IT systems. Compliance burden will be minimised at both ends. It is envisaged that the review should not take up more than twenty to thirty person-days of MBIE time.

Responsibilities

The Statistics NZ team will:

- Review relevant documentation and interview key personnel where information is not documented relating to the MBIE organisation, systems and infrastructure; and similar reviews conducted in New Zealand and internationally.
- Assess this information against the requirements of the NZ Principles and Protocols for Official Tier 1 Statistics and other international best practice frameworks.

- Analyse and draw conclusions about the design and capability of the organisation, infrastructure and systems to sustainably deliver and assure data of sufficient quality.
- Make recommendations about any improvements that can be made or lessons learned.
- Keep MBIE informed about the structure and progress of the review.
- Make reasonable requests of MBIE staff.

The MBIE Sector Reporting team will:

- Provide all existing relevant documentation.
- Where the requested documentation does not exist or is not adequate for the needs of the review, provide free and frank description and explanation.

Governance

Inter-agency governance will be overseen by Rachael Milicich, General Manager Customer Delivery (Statistics NZ) and Michael Bird, General Manager, Institutions and Systems Performance (MBIE).

As sponsors, Rachael and Michael will:

- Sign off the terms of reference of the review
- Meet to discuss progress of the review at the mid-point
- Meet at the end of the review, and
- Sign off the final report that will be made public
- They will also ensure that any necessary resources are made available to undertake the review.

Deliverables

A concise draft report completed by the end of June 2015.

A final concise report completed, if required, by September 2015.

MBIE and Statistics NZ will jointly work on a communications strategy to support publication of report(s) arising from this review.



Appendix 2: Recommendations from 2011 Tourism Data Domain Plan by topic

Topic 1 – The value of tourism to New Zealand

What value is tourism adding to New Zealand, both directly and indirectly?

Recommendation 1: Redevelop the IVS to improve coverage and reliability.

- Redevelopment of the IVS. This should consider the questionnaire length, the modular approach, taking samples at all arrival ports, the sample size, the mode of collection, the potential alternative data (options being developed).
- Remove international education segment from the IVS and work with the Ministry of Education and Statistics NZ to have an agreed numbers and value series. There also needs to be an agreed definition of education, as the separately developed series is likely to be levies based. The information on school trips, however, should remain a part of the IVS.
- Develop a cruise passenger series (transit only) which includes numbers and value. Evaluate the options for including it with the International Travel and Migration data and the IVS (measures must be consistent between the two collections).
- Investigate how regions could be better informed by the IVS data, without a false impression of the accuracy of the data (eg release at Territorial Authority—16 regions—and allow access to lower level by expert users).

Recommendation 2: Develop regional indicators of tourism from alternative data sources.

- Develop a set of regional tourism indicators to replace the DTS. This might include domestic electronic data transactions, some form of CAM, collection of tourism attractions and an activity monitor (eg the Rotorua activity monitor) and usage of regional infrastructure (conservation estate/concession data).
- Retain the DTS in its current form until the Regional Indicator Series is established and the TSA methodology is revised (approx. 2-3 years)

Recommendation 3: Use the Statistics New Zealand business data to develop an understanding of the value of the various tourism sectors, including the generation of tourism and Māori identification mechanisms. The data should be considered from both a revenue and employment perspective.

- Develop flags for tourism and Māori businesses within the Statistics New Zealand business dataset. By looking at various aspects of firm performance within this dataset, identify business groupings that have high contributions to the tourism sector and analyse size and growth rates and the characteristics that influence this.

Recommendation 4: In conjunction with the development of regional data (Recommendation 2), the Accommodation Survey should be reviewed to address respondent load and declining response rates. The information needs for the accommodation sector will also need to be addressed as part of this.

- Review the Accommodation Survey in conjunction with accommodation sector associations to reduce the respondent load of the CAM data and improve its use and reliability. This may include working with property management systems to improve linkage, online/electronic forms or submission, moving from census to sample, reviewing the population (eg serviced apartments), reviewing the groupings (hotels and pubs), looking at the data collected (country-of-origin for top international markets).

- Investigate options to provide benchmarking reports to respondents of the Accommodation Survey.
- Improve presentation of the information – for example graphically and geographically

Recommendation 5: Set up a research programme that rotates through the niche and subsectors of interest, thereby generating data/studies on a cyclical basis.

- Set up a research programme that coordinates the collection and assembly of data for niche and sub-sectors that are not able to be easily extracted from the main dataset. This should include a schedule of updating visitor profiles (by country-of-origin, activity type etc. This could be resourced internally or contracted out); emerging market reports that combine information from the VEM, IVA and IVS; and forecasting which focuses on one or two new emerging markets each year.

Topic 2 – The growth, innovation, productivity and efficiency of tourism businesses

Are businesses within the tourism industry world-class and well managed? How can they become more productive, innovative, and profitable?

Recommendation 6: Develop a business scorecard which shows relative sector value, productivity and efficiencies (labour and capital).

- Develop an understanding of the business competitiveness of the various tourism sectors and devise a scorecard to measure performance (sector value, productivity and efficiencies – labour and capital). The likely data sources for this would initially be sourced from Statistics New Zealand – i.e. the LBD, LEED and AES.

Topic 3 – The value of government interventions

What is the optimal level and mix of government investment in the tourism industry to generate the most benefit to New Zealand? Is the mix likely to need to change in the future?

Recommendation 7: Develop an agreed methodology for determining the return on investment, addressing the issues of indirect returns and estimating any incremental benefit that results from an investment.

- Develop a methodology and a better understanding of ROI measurements – especially the indirect and hard-to-measure impacts. This would need to be done alongside other government agencies.

Topic 4 – Global competitiveness

How can New Zealand become more competitive as a visitor destination? What key features could be enhanced and what barriers reduced or removed?

Recommendation 8: Develop datasets that look at visitor satisfaction and decision-making processes, and ensure that the data is accessible and aligned to other initiatives.

- Improve communication with industry on the data that the VEM contains, including providing links from the Ministry's tourism research website to TNZ, and making a subset of data available on the website.
- In conjunction with Tourism New Zealand, investigate providing VEM tables of data to allow more exploration of the data for other purposes. It could also be combined with IVA and IVS type data. This could include a subset of questions, a delayed release for commercial reasons, or a requirement for registration to access the dataset.

- Work with Tourism New Zealand to clearly identify the objectives of the VEM and how to communicate it. Consider combining it with the IVS and look at the best mechanism for measuring visitor satisfaction and the delivery of product development information.
- Investigate/develop models of how to measure the ability to influence travel decisions – both on coming to NZ and activity once in NZ. Use this information to decide what (if any) of this type of data should be collected.

Recommendation 9: Investigate the use of social media and user-generated media (eg TripAdvisor) to monitor and provide feedback on global comparisons and competitiveness.

- Investigate in conjunction with Tourism New Zealand and RTOs the potential to mine information from social media to supplement directly-collected attitude and perception data.
- Investigate new technologies to see if data can be used to provide real time indicators of tourism activity – for example mobile phone tracking, GPS, social media, downloading patterns.

Recommendation 10: Improve the flow of information about visitor satisfaction and decision-making and ensure it reaches all parts of the tourism industry.

- Investigate how the information currently collected on visitor satisfaction and potential new sources can be fed back to tourism operators in a targeted and meaningful way.

Recommendation 11: Investigate how the role of Māori culture and heritage can be captured in any decision-making and visitor satisfaction data.

- As part of the previous initiatives (1.1, 2.1, 9.1 and 10), ensure that data is collected on the role that Māori play in tourism.

Recommendation 12: Improve the methodology of forecasts so that they provide best and worst case options, incorporate more international future-focused information, more information on emerging markets, and provide access to real-time bookings.

- The forecasting methodology needs to be improved to contain updated/modelled actuals for the previous year, a regional breakdown for the previous year, a forecast for the next five years to include best and worst case scenarios, a forecast for next five years of the top 10 markets, a case study of selected emerging markets, and information from forward bookings.
- Alignment of the tourism year – forecasts currently use a calendar year, while TSA uses the year ending in March, and IVS/DTS use the year ending in June.
- Any publication should be explicit about the modelling done and the assumptions used (exchange rate, price of fuel, economic conditions etc.).
- Investigate the feasibility of doing different periods of forecasting – for example two-year forecasts every six months and 10-year forecasts every two years. Need to consider how different they would be from the five-year forecasts and what the implications would be on the methodology.

Topic 5 – The sustainability of New Zealand tourism

How sustainable is tourism in New Zealand, and how can it be improved to positively impact on New Zealand as a destination?

Recommendation 13: In conjunction with other countries (Australia and Canada), develop a framework for measuring sustainability in the tourism industry (such as a balanced scorecard) and identify the data required to monitor it.

- Develop a sustainability framework that allows the development of a balanced scorecard (economic, social, environmental and cultural). Identify the required data and determine the best way of collecting it on a regular basis. This should be

done in conjunction with international tourism agencies (eg Australia, OECD, UNWTO, APEC) as thinking on this needs to be global in nature.

Supplementary recommendations

Recommendation 14: Create a recognised repository or hub for the tourism data that makes it easy for users to find the information they require – i.e. forward plans, strategy or data sources.

- Develop an overarching programme with clear roles for various participants to help people understand how things fit together and generate a transparent long-term plan.
- On the Ministry's tourism website, develop an overall tourism information page – that is, make this the first place that people come and have links to other areas (eg an international data link to UNWTO, TNZ, and other associations).
- Develop a communications strategy to raise the profile of the tourism information being produced and generate awareness of what is available.
- Develop and implement a dissemination model to target the key user groups. Three segments have been identified in the initial consultation: quick facts users, users seeking modifiable tables/data, and expert users (may be by subscription or remote access tools).
- Develop a data structure and dictionary that allows the relationships between datasets and variables to be identified.

Recommendation 15: Clarify and improve understanding around the tourism sector's performance.

- Investigate the development of an annual tourism report that incorporates information from all the sectors. There needs to be agreement on it this year as currently TAS uses March as the end of the year and forecasts use a calendar year.
- Develop an indicator series that approximates the TSA from quarterly data.
- As resources are available, undertake studies and projects that will further enhance the TSA. These projects should include the introduction of a constant price series, an evaluation of components that can be published at regional level (eg employment), and an investigation into where the value from tourism is being increased or changed (regions, sectors, etc.).

Recommendation 16: Clearly communicate the findings of each International Travel and Migration Survey and create more value from the data.

- Review the data generated in the International Travel and Migration Survey on visitor nights/length of stay, the series and the options. The series should also be included in release data.
- Review the risk of having data on multiple websites, such as the Ministry's tourism research website or Stats NZ and TNZ websites.
- Actively work with Customs and Immigration to improve data collection on the arrivals and departure cards (eg collect information on a night's stay instead of a day's stay, move to full collection instead of sampling some variables, and collect email addresses for the IVS).

Recommendation 17: Investigate the viability of generating tourism flows on a five-year basis.

- Investigate how to produce a tourism flows model every 4-5 years, and look at what data sources can be used to create minimal respondent load.

Recommendation 18: Continue collection of convention data as supplementary to the IVS.

- Extend the life of the CAS survey by 3-5 years (needs to run until the National Convention Centre is established and at least two years after). Improve the reporting of the CAS to make it more understandable and provide more access to the data to allow further analysis, including a quarterly and annual time series. Consideration should be given to reporting year-on-year and month-on-month.
- Investigate the potential to collect the data by convention type and whether quarterly future bookings can be monitored.

Recommendation 19: Continue collecting forward-focused data and develop new reports if possible.

- Commit to maintaining the Tourism Industry Monitor quarterly (or more often) with principles of quick turnaround, working with associations, and providing direct feedback to respondents.
- Investigate if forward-looking indicators can be developed to help with planning.

Recommendation 20: Develop a mechanism for benchmarking the performance of regions.

- Investigate setting up a benchmarked way of monitoring satisfaction that can be compared to other regions. In Australia, they do this via the Destination Visitor Survey (<http://www.tra.gov.au/research/regional.html>). Provide a benchmarked way for regions to monitor their performance and satisfaction levels every 2-5 years (for example: http://www.tra.gov.au/research/VPS_Report_Goldpercent20Coast.html).



Appendix 3: Summary of Principles and Protocols for Producers of Tier 1 Statistics

Trust and confidence in Tier 1 statistics is assured through compliance with the Principles and Protocols for Producers of Tier 1 Statistics, a set of practice requirements based on the *United Nations Fundamental Principles of Official Statistics*. A full copy of the *Principles and Protocols* document is available on the Official Statistics System website www.statisphere.govt.nz.

The following is a short summary of the principles and protocols.

Principles

Principle 1 – Relevance

Official statistics produced by government agencies are relevant to current and prospective user requirements, in government and in the wider community.

Principle 2 – Integrity

Official statistics gain public trust by being produced and released using objective and transparent methods.

Principle 3 – Quality

Official statistics are produced using sound statistical methodology, relevant and reliable data sources, and are appropriate for the purpose.

Principle 4 – Coherence

The value of statistical data is maximised through the use of common frameworks, standards and classifications.

Principle 5 – Accessibility

Access to official statistics is equal and open.

Principle 6 – Efficiency

Official statistics agencies strive to be efficient and provide value for money.

Principle 7 – Protecting respondent information

Respondents' rights to privacy and confidentiality are respected and their information is stored securely.

Principle 8 – Minimising respondent load

The costs of compliance are kept to an acceptable level and data is collected only when the expected benefits of a statistical survey exceed the imposition on providers.

Principle 9 – Maximising existing data sources

Maximise the use and value of existing data by integrating or aligning available statistics and administrative sources.

Principle 10 – International participation

Official statistics agencies make use of and contribute to international statistical developments.

Protocols

Protocol 1: Quality

Official statistics are produced using sound statistical methodology and relevant and reliable data sources, and are appropriate for the purpose.

- Professionalism
- Good management practice
- Continuous improvement
- Relevance
- Accuracy
- Timeliness
- Consistency
- Interpretability

Protocol 2: Frameworks, Standards and Classifications

The value of statistical work is maximised through the use of common frameworks, standards and classifications.

- Common frameworks
- Standard practice
- National & international comparability
- Promoting common standards

Protocol 3: Respondent Management

The costs of compliance are kept to an acceptable level and data is collected only when the expected benefits of collection exceed the cost to respondents.

- Respondent load
- Collection value
- Using administrative data
- Data sources
- Reducing load
- Data collection methods
- Effective communication
- Participation by Māori

Protocol 4: Confidentiality, Privacy and Security

Respondents' rights to privacy and confidentiality are respected and their information is stored securely.

- Legal and ethical obligations

- Awareness of obligations
- Use for statistical purposes
- Managing privacy concerns
- Preserving confidentiality
- Security
- Administrative data

Protocol 5: Release Practices

Access to official statistics is equal and open.

- Accessibility
- Presentation and dissemination
- Release of Tier 1 statistics
- Pre-release security
- Unbiased reporting
- Unambiguous presentation
- Errors in published data
- Revisions

Protocol 6: Management documentation and preservation of statistical records

Tier 1 statistics are treated as an enduring national resource used for the benefit of all society.

- Data retention policy
- Data custodians
- Contextual documentation
- Protection of statistical resources
- Historic preservation



Appendix 4: Stakeholders

The purpose of this appendix is to present the views of MBIE's tourism industry stakeholders. We have collated and summarised this feedback. There was a large degree of consensus between the stakeholders we interviewed regarding their perspectives on MBIE's tourism statistics. The stakeholders agreed that the information currently provided by MBIE on the tourism industry is highly valuable, as such the points below reflect areas that stakeholders have identified as opportunities for improvement.

Dissemination of statistics

Almost all the stakeholders the review team interviewed expressed a desire for a higher level of analysis and explanation in the releases, particularly when the high-level results were unexpected. The review team recommends that MBIE and Statistics NZ could work more closely together in releasing tourism statistics to provide context and give greater assurance on the quality and validity of the data.

Stakeholders expressed a desire to better understand the methodology used to collect, process, and analyse the suite of tourism statistics produced by MBIE. This could be an area that Statistics NZ supports MBIE in developing further, if costs permit.

MBIE is in the process of moving to a new website and is developing and implementing new dissemination tools. This work will address the desire that stakeholders have to be able to more easily access tourism data in one place.

Stakeholders requested that tourism data be published at the lowest possible level. Many thought that this would enhance the usefulness of the statistics that are currently produced, especially in guiding investment and policy decisions. Some stakeholders also thought data being released at a lower level would give them greater confidence in the data. While it is desirable to release data to a low level, and therefore increasing the use of the data, the review team understand that MBIE has to balance this against quality of the data and confidentiality. Currently MBIE is doing a good job getting this balance right. It should be noted that as data is disseminated at a lower level the quality of the data decreases, due to the design parameters being exceeded. As MBIE increasingly make use of administrative data (eg ECT data), its sample sizes will increase, which may allow it to publish more detailed data.

MBIE's tourism team could update their release calendar when changes occur, keeping customers informed. In discussions with the MBIE tourism team the review team noted that MBIE has tight analysis and dissemination timeframes, which can leave little time to follow up on anomalies in the data ahead of publication and can lead to delays. While this can put the tourism team under pressure, they do a good job getting the data out as soon as possible for their customers.

Possible new developments

Almost all stakeholders we talked thought there was insufficient information about domestic tourism and tourism flows. With the Resident Travel Survey not being published, there is a big gap for stakeholders trying to understand domestic tourism volumes. The review team is aware this is something that MBIE is currently working on, with the aim of publishing information once anomalies in the data have been resolved.

Several stakeholders thought it would be good to produce statistics about New Zealand's market share of international tourism and compare New Zealand's tourism sector with tourism sectors of other countries. Such data could provide crucial information on the performance of New Zealand's tourism industry, and support strategic decision-making. While this could be valuable

information for the tourism industry in New Zealand this sits outside MBIE's current programme of tourism statistics and could be picked up by the tourism sector itself.

The stakeholders we interviewed did not feel there was much information provided by MBIE on the topic of Māori tourism. Statistics NZ has recently produced the annual update of Tauranga Umanga Māori, which includes information on Māori tourism. There is an opportunity for MBIE and Statistics NZ to work more closely on publishing and promoting information already available to their user groups.